UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BAHRAM G. KERMANI

Appeal 2007-1441
Application 09/487,522[1]
Technology Center 2100

Decided: November 27, 2007

Before: MAHSHID D. SAADAT, JAY P. LUCAS,
and JOHN A. JEFFERY, *Administrative Patent Judges*.

LUCAS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

Appellant appeals from a Final Rejection of claims 1, 3 to 9, 11 to 16, 18, 19, 22, 23, 25, 26, 28 to 32, and 37 to 42 under authority of 35 U.S.C. § 134. The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b).

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[1] Application filed January 19, 2000. The real party in interest is Lucent Technologies, Inc.

Appellant's invention relates to a system, method and program for automatically abstracting information in an electronic document. In the words of the Appellant:

> The present invention is a method of abstracting an electronic document. A user of the electronic document is prompted to select at least one abstracted version of the electronic document. A set of instructions for abstracting the electronic document is selected. The selected abstracted version of the electronic document is created by executing the selected set of instruction. The selected abstracted version of the electronic document is then outputted in a predetermined format.
> (Specification, page 2)

Claim 1 and Claim 16 are exemplary:

1. A method of abstracting an electronic document comprising the following steps:

prompting a user to select an abstracted version of the electronic document to be created from a plurality of abstracted versions available to be created;

responsive to a selection by the user of the abstracted version to be created, creating the selected abstracted version of the electronic document by executing a set of instructions corresponding to the electronic document, wherein the instructions are, before said abstracted version is selected by the user, customized to the electronic document, the customization comprising a plurality of weights pre-assigned to respective portions of the electronic document to enable creation of said plurality of abstracted versions; and

outputting the abstracted version of the electronic document in a predetermined format.

16. A computer data signal embodied in a carrier wave encoded with compute program code for directing a processor to abstract an electronic document comprising:

a first code segment for prompting a user to select an abstracted version of the electronic document to be created from a plurality of abstracted versions available to be created;

a second code segment for creating, responsive to a selection by the user of the abstracted version to be created, the selected abstracted version of the electronic document by executing a set of instructions corresponding to the electronic document, wherein the instructions are, before said abstracted version is selected by the user, customized to the electronic document, the customization comprising a plurality of weights pre-assigned to respective portion of the electronic document to enable creation of said plurality of abstracted versions; and

a third code segment for outputting the abstracted version of the electronic document in a predetermined format.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Katariya	US 6,789,230 B2	Sep. 7, 2004
Grefenstette	US 6,289,304 B1	Sep. 11, 2001

Rejections:

Claims 1, 3 to 9, 11 to 16, 18, 19, 22, 23, 25, 26, 28 to 32, and 37 to 42 stand rejected under 35 U.S.C. § 103(a) for being obvious over Grefenstette in view of Katariya.

Appellant groups the claims as follows:

Group I: Claims 1, 3 to 9, 11 to 16, 18, 19, 22, 23, 25, , 26, 28 to 32, and 40 to 42 represented by claim 1
Group II: Claims 37 to 38, 39 and 41 represented by claim 37
Group III: Claims 40 and 42 represented by claim 40

See 37 CFR § 1.41.37 (c) (vii). *See also In re McDaniel*, 293 F.3d 1379, 1383 (Fed. Cir. 2002) ("If the brief fails to meet either requirement [of

37 CFR § 1.192(c)(7)], the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim.").

Appellant contends that the claimed subject matter is not rendered obvious by Grefenstette in combination with Katariya, for failure of the references to teach the claimed subject matter. The Examiner contends that the claims are properly rejected based on teaching of the Grefenstette and Katariya references.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for their respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2004).[2]

We affirm-in-part.

ISSUE

The issue is whether Appellant has shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 103(a) (2004). The issue turns on whether all the claimed limitations can be found in Grefenstette or Katariya,

[2] Appellant has not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group, except as will be noted in this opinion. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See In re Young,* 927 F.2d 588, 590, (Fed. Cir. 1991).

specifically the user selecting one of multiple customized sets of instructions for abstracting the electronic document.

FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. Appellant has invented a method and system for semi automatically abstracting an electronic document in a plurality of ways, either generically for any type of document (Spec. p. 6, l. 10) or particularized to a specific document (Spec. p. 7, l. 17). The particularized abstracting may be customized to a certain document or document type. For example, paragraphs (or sections, sentences or words) may be weighted in a document using a scoring method. (Spec. p. 8, top). Paragraphs with low weights may be removed from the abstract. Weighing may also be subject matter based. For example, in a particular document concerning industries, references to the computer industry may be weighted at 8, and the textile industry at 7. (*Id.*, middle). The user may choose to eliminate all industrial references except those weighted at 7 or 8. (Spec. p. 9, l. 10).
2. The invention covers developing and storing a plurality of particularized sets of instructions for one electronic document. These sets of instructions may have descriptions of the way they abstract the document, and these descriptions themselves may act as prompts "informing the user of the significance of each level of abstraction and

permitting a user to select a level analogous to his or her individual needs for the electronic document." (Spec. p. 9, ll. 23-25).

3. The method of this invention may be encoded in a computer program stored on a hard drive, for example, or "encoded in a computer data signal embodied in a carrier frequency wave. This computer data signal may be transferred to the computer through a data line…". (Spec. p. 10, ll. 17-19).
4. The patent reference Grefenstette presents a method and system for automatically abstracting an electronic document, for situations where quickly understanding a document is required. Various techniques using parts of speech (POS) for abstracting documents are presented. (Col. 2, ll. 15-17). Users can choose different "reduction levels" (col. 8, l. 20) by various selection techniques, including user interface dialogs, displays, mouse clicks etc. (Col. 8, l. 28). The various abstracting techniques can be applied before the user selects the level of abstracting, so the user can choose which level will be used. (Col. 11, l. 20). Users could choose, for example, shallow parsing or full parsing in Grefenstette as different abstracting levels. (Col. 10, ll. 48 to 56).
5. Katariya, a patent also cited by the Examiner, also teaches automatic abstracting of electronic documents. (Col. 3, l. 58). Katariya teaches weighting based on the sentences in the electronic document, or on a subset of the sentences in the document. (Col. 5, ll. 37 to 40). The techniques addressed to the method of Figure 2 are used in an example in Tables 1 and 2. (Cols. 6 and 7). The weighting starts by

examining the sentences in a particular document. (Table 1). Then the document is further abstracted by considering the subsets of all the documents, looking for the ones with the highest weights. (Table 2). Starting in column 7, line 33, and in relation to Figure 3, an alternative summary method is disclosed which may generate different summaries than those of the method of Figure 2.

PRINCIPLES OF LAW

On appeal, Appellant bears the burden of showing that the Examiner has not established a legally sufficient basis for the rejection of the claims.

"In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

"To reject claims in an application under section 103, an Examiner must show an unrebutted *prima facie* case of obviousness. … On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness." [citations removed] *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)

Our reviewing court states in *In re Zletz*, 893 F.2d 319, 321, (Fed. Cir. 1989) that "claims must be interpreted as broadly as their terms reasonably allow." Our reviewing court further states that "the words of a claim 'are generally given their ordinary and customary meaning.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*) (internal citations omitted). The "ordinary and customary meaning of a claim term is the

meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." (*Id.* at 1313).

"This case, however, is dissimilar from *Gulack*. There the printed matter and the circularity of the band were interrelated, so as to produce a new product useful for "educational and recreational mathematical" purposes. Here, addition of a new set of instructions into a known kit does not interrelate with the kit in the same way as the numbers interrelated with the band. In *Gulack*, the printed matter would not achieve its educational purposes without the band, and the band without the printed matter would similarly be unable to produce the desired result. Here, the printed matter in no way depends on the kit, and the kit does not depend on the printed matter." *In re Ngai*, 367 F.3d 1336, 1339 (Fed. Cir 2004)

Laws of nature, physical phenomena and abstract ideas are excluded from patent protection. *Diamond v. Diehr*, 450 U.S. 175, 185 (1981).

ANALYSIS

From our review of the administrative record, we find that the Examiner has presented a prima facie case for the rejections of Appellant's claims under 35 U.S.C. §103. The prima facie case is presented on pages 3 to 8 of the Examiner's Answer.

In opposition, Appellant presents three main arguments, corresponding to the three groups of claims.

Appellant contends that Examiner erred in rejecting Claims 1, 3 to 9, 11 to 16, 18, 19, 22, 23, 25, 26, 28 to 32, and 40 to 42 under 35 U.S.C. 103(a). We first note that both Grefenstette and Katariya are addressed to

the same field of endeavor, producing automated abstracts of electronic documents. Reviewing the findings of facts cited above, and the claim in question, we first find that Grefenstette teaches the prompting of the user to select an abstracted version of the document to be created from a plurality of versions that could be created. In Grefenstette the versions could be the shallow or the fully parsed versions of the document. The Examiner combines the references by substituting the different weighting based techniques of Katariya into the selection system of Grefenstette. (Ans. p. 11, middle).

Claim 1 requires that the "instructions are, before said abstracted version is selected by the user, customized to the electronic document, the customization comprising a plurality of weights pre-assigned to respective portions of the electronic document…." In Katariya, the instructions (or method) of abstracting are customized to the electronic document. Note in the example in column 6 of Katariya that the method tracks the number of sentences, and the number of words in the sentence. In Table 2 we see that weights are assigned to portions of the electronic document, in this case the sets of sentences. Both Katariya and Grefenstette teach different abstracted versions of the document to be abstracted. (FF 4 and FF 5). Although in both Grefenstette and Katariya it would be obvious for both versions' instructions to be available before the choice, so the selection process described in Grefenstette (FF4) could be effected, Grefenstette does make that explicit. (See col. 11, l. 17).

We thus find that the limitations of Claim 1 are met by the cited art, and the claim is rendered obvious over that art.

The distinguishing limitation of the Group 2 claims is that those claims 37, 38, 39, and 41 "further recite that each abstracted version from the plurality of versions of the electronic document is associated with a respective subset of individual weights from the plurality of weights assigned to the electronic document…". (App. Br., p. 8, middle). From FF5 above it is manifest that Katariya teaches using a subset of the full set of sentences in the document to be abstracted. Indeed that point is mentioned in the Appellant's Brief, page 7, top. Thus, we find that the claims of Group 2 are likewise rendered obvious over Grefenstette in view of Katariya.

The claims of Group 3, claims 40 and 42, add the following limitation: "prior to said prompting step, said user selects a set of instructions for abstracting the electronic document from a plurality of sets of instruction for abstracting the electronic document, each of said sets of instruction being customized, before selection thereof, to said electronic document, each of said sets of instructions configured to enable creation of a plurality of different abstracted versions of said electronic document." Thus, according to the Specification, different users can select the different types of abstracts that each may need of the document. We do not find this feature in the cited references, Grefenstette or Katariya, and do not find claims 40 and 42 to be obvious over the cited prior art.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner erred in rejecting claims 40 and 42. The Examiner did not err in rejecting of all the other claims, 1, 3 to 9, 11 to 16, 18, 19, 22, 23, 25, 26, 28 to 32, 37 to 39 and 41.

OTHER ISSUES

REJECTION OF CLAIMS 9, 11 to 16, 18, 19, 22, 30, and 31 UNDER 37 C.F.R. § 41.50(b)

We make the following new grounds of rejection using our authority under 37 C.F.R. § 41.50(b).

Claims 9, 11 to 16, 18, 19, 22, 30, and 31 are rejected under 35 U.S.C. 101 for reciting non-statutory subject matter.

Claims 9, 11 to 15, and 30 recite a computer readable medium encoded with a computer program. In the Specification, page 10, line 16 *ff* the Appellant defines computer readable medium as including a data signal embodied in a carrier frequency wave. Claims 16, 18, 19, 22, and 31 are even more explicit, actually claiming that signal.

Such a claim for computer instructions embodied in a signal only is not considered by this office to be statutory under 35 U.S.C. § 101.[3] This policy has recently been confirmed by the Court of Appeals for the Federal Circuit in *In re Nuijten*. "A transitory, propagating signal like Nuijten's is not a 'process, machine, manufacture, or composition of matter.' Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter." *In re Nuijten*, 500 F.3d 1346, 1357-58 (Fed. Cir. 2007).

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[3] See, e.g., *In re* Nuijten, 500 F.3d 1346, 1359 (Fed. Cir. 2007). Ex Parte Hartmann, No. 2006-1607, 2006 WL 2700810, at 4 (B.P.A.I. 2006) (non-precedential). 'Signals' are not statutory subject matter. See also "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility," 1300 Off. Gaz. Pat. Office 142, Annex IV(c) (Nov. 22, 2005).

We thus find claims 9, 11 to 16, 18, 19, 22, 30 and 31 as unpatentable for reciting non-statutory subject matter.

DECISION

The Examiner's rejection of claims 40 and 42 is reversed. The rejection of claims 1, 3 to 9, 11 to 16, 18, 19, 22, 23, 25, 26, 28 to 32, 37 to 39, and 41 is affirmed.

In addition, claims 9, 11 to 16, 18, 19, 22, 30, and 31 are rejected under 35 U.S.C. § 101 as unpatentable for being non-statutory.

AFFIRMED-IN PART
37 C.F.R. § 41.50(b)

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